

## **REMARKS**

Claims 17, and 23-28 are pending, and stand rejected. Claims 18-22, and 29-30 are cancelled. Claim 17 has been amended to delete a specific range of water content and to add the limitation to an aqueous based formulation in the composition of the invention. Support for this limitation may be found on page 5, line 2 of the instant text, as well as in the examples which all relate to aqueous based formulations. No new matter is introduced with this amendment.

### Reply to the rejection of claim 17 under 35 U.S.C. § 112.

. The rejection relating to a range of water content is moot in view of deletion of that range.

Claims 23-28 have been amended to cure the lack of antecedent basis in claim 1.

Applicants respectfully disagree with the Examiner with regard to use of the term "at least about." The term "at least" is indeed a clear lower limit, and use of the term "about" is perfectly valid in appropriate fact situations. The Examiner cites *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 18 USPQ 2D 1016, in support of his position that it is unclear what controls the metes and bounds of the phrase "at least about", but the fact situation in *Amgen* is far removed from that of the present application.

In *Amgen* the expression "at least 120,000" was cancelled and new claim language "at least about 160,000" was submitted. The court found the addition of the word "about" to constitute an effort to recapture a mean activity somewhere between 120,000, which the patent examiner found was anticipated by the prior art and 160,000 claims which were previously allowed. In the instant fact situation the term "at least about" was used *ab initio* in the specification and claims, and effort to recapture was not an issue. The court in *Amgen* specifically stated that "we caution that our holding that the term "about" renders indefinite claims 4 and 6 should not be understood as ruling out any and all

uses of this term in patent claims." In support of that view, the court cited *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 220 USPQ 303, in which the term "use of "stretching at a rate exceeding about 10% per second" in the claims was not considered indefinite".

The above discussion applies equally to use of the term "no more than about", where "no more than" is a clear upper limit, and use of "about" is perfectly permissible.

Reply to the rejection of claims 17-19 and 23-28 under 35 U.S.C. § 103(a)

These claims are rejected as being unpatentable over the combination of U.S. Patent Nos. 6,010,686 to de la Poterie *et al.* ("de la Poterie"), 5,626,840 to Thomaides *et al.* ("Thomaides"), 6,264,933 to Bodelin *et al.* ("Bodelin"), and 6,039,935 to Mohammadi ("Mohammadi). For the following reasons, Applicants respectfully traverse this rejection.

The present invention is based on the surprising discovery of the synergy between the combination of a solubilized anionic polyurethane and a solubilized poly(meth)acrylate, wherein the polyurethane is the major component between the polyurethane and the poly(meth)acrylate, and at least one solvent. The dual polymer system of the present invention achieves added SPF protection as well as water resistance. A further advantage is that the composition of the invention is an aqueous solution that may be applied as such to skin, and does not need to be soluble in the solvents and propellants employed in spray on systems.

De la Poterie is directed towards dispersion of particles to make a film on skin, wherein the composition includes an aqueous dispersion of film-forming polymer particles (Abstract). Useful film-forming polymers include synthetic polymers of the polycondensate or radical type, polymers of natural origin, and mixtures thereof (col. 2, lines 30-39). De la Poterie does not teach or suggest neutralized or solubilized

polyurethanes. Further, de la Poterie does not teach or suggest the second polymer of the present composition (compositions comprising only the polyurethane are exemplified). Finally, de la Poterie does not teach methods for treating skin for SPF protection, water resistance and enhanced aesthetics on skin with compositions as presently claimed.

Just as important, de la Poterie does not teach to neutralize the polymer, as this would make it water soluble. It also does not teach the use of a second polymer or the use of a solvent for assisting with the solution. The examiner asserts that de la Poterie does suggest the use of a second polymer, but this second polymer is described as a thickener or suspending aid and not a functional polymer employed for film forming properties.

Thomaides is directed towards polyurethanes with carboxylate functionality for use as hair fixatives (e.g., hairsprays) (Abstract). The polyurethane of Thomaides is soluble or dispersible in water, is prepared from an organic diisocyanate, a diol, and a 2,2-hydroxymethyl-substituted carboxylic acid, and is neutralized with a cosmetically acceptable organic or inorganic base and formulated into a hair fixative composition containing low amounts of volatile organic solvent (Abstract). Thomaides does not teach the use of its polyurethanes in skin care compositions. As noted by the Examiner, Thomaides, like de la Poterie, does not teach or suggest the second polymer. Therefore, the combination of Thomaides and de la Poterie still is lacking in (1) the disclosure of the second polymer and (2) use of the composition for skin care as presently claimed.

Bodelin teaches cosmetic compositions for keratin fibers (hair - mascara for eyelashes; col. 2, lines 1-12) formed from at least one lamellar filler and an aqueous phase dispersed in a liquid fatty phase containing at least one volatile organic solvent (Abstract). The aqueous phase contains a polymer system comprising at least one filmforming polymer dispersed in the aqueous phase in the form of solid particles

(Abstract; col. 1, lines 55-63; col. 2, lines 18-21). Like de la Poterie, the film-forming of Bodelin is chosen from polycondensates (e.g., anionic polyurethanes; col. 2, lines 34-35), radical-generated polymers, and polymers of natural origin (col. 2, lines 22-25). Bodelin teaches that its compositions can also include an additional water-soluble film-forming polymer such as polyacrylates and polymethacrylates (col. 4, lines 30-49), but Bodelin also teaches low levels of water in its composition (col. 4, lines 26-29) where the total weight of the aqueous phase may range from 1 to 35 wt.%. Bodelin certainly gives no hint to properties such as SPF protection, water resistance and enhanced aesthetics on skin, as presently claimed.

As de la Poterie, Thomaides and Bodelin, alone or in combination, do not teach or suggest a method of treating skin using the synergistic combination of the two types of solubilized polymers and water content according to the presently claimed invention, those references cannot be said to render the instant claims unpatentable.

Mohammadi discloses a cosmetic sunscreen composition which includes at least one organic sunscreen, a crosslinked non-emulsifying diloxane elastomer, a volatile siloxane and water. The composition is an oil-in-water emulsion. This reference is completely irrelevant to the solubilized anionic polyurethane and solubilized poly(meth)acrylate mixture of the present invention.

The Examiner purports to have presented a *prima facie* case of obviousness, but applicants respectfully disagree. As discussed above, De la Poterie is directed towards dispersion of particles to make a film on skin, while Thomaides is directed towards polyurethanes with carboxylate functionality for use as hair fixatives, and Bodelin teaches cosmetic compositions for keratin fibers (hair - mascara for Eyelashes). The effect of compositions, known to be effective for use on hair, would not be predictable to one of ordinary skill in the art when used on skin. One of ordinary skill in the art would know the function the compositions of Thomaides and Bodelin performed on hair, but would not be able to assume that those compositions would

function in any particular way on skin, and the result of the combination of those compositions would not be predictable. The combination could therefore not be considered obvious. *KSR International Co. v. Teleflex Inc.*, 550 US 398.

Notwithstanding the question of whether the Examiner has stated a *prima facie* case to establish a presumption of obviousness, the surprising discovery of the synergistic combination of the invention presents a secondary consideration that would overcome that presumption. The findings set forth in the examples of the instant application cannot be ignored. Summaries of comparisons of the performance of the compositions of the invention and various controls are provided on pages 14, 15 and 19 of the specification. Whether the tests were for subjective sensory evaluations, or SPF value or efficiency, the compositions of the invention exhibit surprising superiority.

Withdrawal, therefore, of the rejection of the instant claims under 35 § U.S.C. 103(a) is respectfully requested.

#### Double Patenting

Attached hereto is an appropriate Terminal Disclaimer to obviate the provisional obviousness-type double patenting rejection relating to co-pending Application No. 10/116,368.

## Conclusion

It is believed that the above amendments and remarks overcome the Examiner's rejections of the claims. Withdrawal of those rejections is respectfully requested. Allowance of the claims is believed to be in order, and such allowance is respectfully requested.

Respectfully submitted,



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